

BILL NO. 6308  
ORDINANCE NO. 6191

**AN ORDINANCE AMENDING CHAPTER 405 (ZONING REGULATIONS) OF THE CODE OF ORDINANCES OF THE CITY OF CLAYTON, MISSOURI, BY ADDING A NEW ARTICLE XXVIII, RENEWABLE ENERGY SYSTEMS, TO DEFINE AND REGULATE SOLAR AND WIND ENERGY SYSTEMS; ADDING DEFINITIONS TO ARTICLE III RELATED TO RENEWABLE ENERGY SYSTEMS; AMENDING THE PERMITTED USES SECTIONS OF ARTICLES XII THROUGH XXII TO ALLOW RENEWABLE ENERGY SYSTEMS IN CERTAIN ZONING DISTRICTS; AND BY AMENDING ARTICLE VIII, SECTION 405.1000 TO INCLUDE A REFERENCE TO RENEWABLE ENERGY SYSTEMS FOR SITE PLAN REVIEW AND OTHER ACTIONS RELATED THERETO.**

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**WHEREAS**, energy conservation and the use of renewable energy are the two most critical components of any rational energy policy, and each component can offer the opportunity to make major strides towards two critical goals: reduction of environmentally harmful emissions and attaining greater national energy independence; and

**WHEREAS**, the City of Clayton has already taken major steps in the area of energy conservation with our commitment to and recognized success as a "Green Power Community", and now wishes to promote similar success by establishing a framework for increased use of renewable energy resources within the City; and

**WHEREAS**, the Mayor and Board of Aldermen find and believe that the regulations, standards and procedures hereinafter provided strike a reasonable and appropriate balance between available consumer-level renewable energy technology and the peaceful aesthetic that makes Clayton a special place to live and work ;and

**WHEREAS**, on January 17, 2012, the Clayton Plan Commission held a public hearing after due notice and, whereas on February 6, 2012, voted to recommend to the Board of Aldermen that the regulations hereinafter set forth be adopted; and

**WHEREAS**, on February 28, 2012, after due notice as provided by law, the Board of Aldermen held a public hearing for the purpose of receiving public comment on the question of adoption of the provisions hereinafter set forth;

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF CLAYTON, MISSOURI, AS FOLLOWS:

**Section 1.**

Chapter 405 (Zoning Regulations) of Title IV (Land Use Code) of the Code of Ordinances of the City of Clayton, Missouri, is hereby amended by the addition of a new Article and seven new Sections, initially to be designated as Article XXVIII and Sections 405.3860 through 405.3920, to read as follows:

**TITLE IV. LAND USE**

## **CHAPTER 405: ZONING REGULATIONS**

### **ARTICLE XXVIII. RENEWABLE ENERGY SYSTEMS**

Renewable Energy Systems are accessory uses which include Solar Energy Systems and Wind Energy Systems that provide supplemental energy to residential, non-residential, and mixed-use buildings.

#### **SECTION 405.3860: PURPOSE STATEMENT**

The purpose of this Section is to provide standards for the installation and use of Renewable Energy Systems as accessory uses within the City of Clayton. This Section seeks to protect properties from incompatible uses in the interest of property values, public health and the welfare of the community while promoting the use of alternative energy sources, where appropriate. This Section provides a process to facilitate the use of these systems in a manner that minimizes adverse impacts and the potential for nuisance.

#### **SECTION 405.3870: ACCESSORY USE**

Renewable Energy Systems shall be considered as an accessory use subject to the provisions of this Section. Roof-mounted Solar Energy Systems are a permitted accessory use in all zoning districts. Ground-mounted Solar Energy Systems are a conditional accessory use and shall be considered an accessory structure in all zoning districts subject to the approval of a Conditional Use Permit pursuant to Article VII of this Chapter.

Building-mounted Wind Energy Systems are permitted in all commercial, service, commercial Planned Unit Development (PUD) or commercial Special Development District (SDD) zoning districts subject to the approval of a Conditional Use Permit pursuant to Article VII of this Chapter; and those which use a freestanding tower shall be considered an accessory structure and are permitted in the HDC—High Density Commercial or S-1—Service zoning districts subject to the approval of a Conditional Use Permit pursuant to Article VII of this Chapter. Wind Energy Systems are permitted conditionally in residential zoning districts pursuant to the requirements set forth in this Section.

#### **SECTION 405.3880: REQUIREMENTS**

The requirements set forth in this Section shall govern the construction and/or installation of all Renewable Energy Systems:

1. Solar Energy Systems, General
  - a. Solar Energy Collectors shall be located in the least visible location from perspectives outside the property lines where panels would be reasonably, though not necessarily optimally, functional.
  - b. Solar Energy Collectors shall be documented by the manufacturer as being non-reflective pursuant to recognized engineering standards showing reflectivity of less than 30 percent or shall be placed such that concentrated sunlight or glare shall not be directed onto nearby properties or streets.
  - c. Solar energy equipment must comply with all setback and lot coverage requirements for the zoning district in which the property is located.
  - d. Building-integrated Solar Energy Systems shall be allowed regardless of visibility, provided the building-integrated system meets all required setback, height and land

use requirements for the district in which the building is located and is approved by the Architectural Review Board.

2. Solar Energy Systems, Residential

a. Ground-mounted Solar Energy Systems:

1. Ground-mounted Solar Energy Systems shall only be located in the side or rear yard of a property.
2. Ground-mounted Solar Energy Systems and supporting structures may not exceed a total height of 10-feet as measured from the average grade at the base of the supporting structure to the highest edge of the system.
3. Ground-mounted Solar Energy Systems must be substantially screened from public view (including adjacent properties and public rights-of-way) by fencing, walls, plantings, or other architectural feature or any combination thereof; provided, however, that the screening shall not be required to be so dense, so tall, or so located as to render the equipment essentially non-functional.

b. Building-mounted Solar Energy Systems:

1. Building-mounted Solar Energy Collectors installed in residential zoning districts shall be: (a) installed in the plane of the roof (flush mounted); or (b) made part of the roof design (capping or framing compatible with the color of the roof or structure); or (c) Building- integrated system. Mounting brackets shall be permitted to be placed parallel on the slope of a rear facing roof if the applicant can demonstrate that the existing pitch of the roof would render the solar energy equipment ineffective or incapable of reasonable operation.
2. When located on a sloped roof, Solar Energy Collectors shall be located on a rear or side facing roof, as viewed from a fronting street. In cases of corner lots or lots with more than one (1) street frontage the side roof fronting a street shall be considered a front facing roof.
3. Solar Energy Systems shall not project vertically above the peak of a sloped roof to which it is attached.
4. When located on a sloped roof, Solar Energy Collectors shall be positioned in a symmetrical fashion and centered on the plane of the roof on which they are located.
5. When located on a sloped roof, Solar Energy Collectors shall be setback at least two (2) feet from any outside edge, ridge, or valley of the roof.
6. Solar Energy Collectors installed on a flat roof must be screened by the use of a parapet or other architectural feature to screen the view from the street or from ground level on adjoining properties.
7. All exterior electrical or plumbing lines must be painted in a color scheme that matches as closely as possible the color of the structure and the materials adjacent to the lines when visible from the street.

3. Solar Energy Systems, Non-residential

a. Ground-mounted Solar Energy Systems

1. Ground-mounted Solar Energy Systems shall only be located in the side or rear yard of a property.

2. Ground-mounted Solar Energy Systems and supporting structures may not in total exceed the accessory structure height limitations for the zoning district in which the property is located. In commercial districts with no such requirement, a maximum height of 20-feet is hereby established. Height shall be measured from average grade at the base of the supporting structure to the highest edge of the system.
3. Ground-mounted Solar Energy Systems must be substantially screened from public view (including adjacent properties and public rights-of-way) by fencing, walls, plantings or other architectural feature or any combination thereof; provided, however, that screening shall not be required to be so dense, so tall or so located as to render the equipment essentially non-functional.
- b. Building-mounted Solar Energy Systems
  1. Building-mounted Solar Energy Systems installed in commercial zoning districts shall be installed (a) in the plane of the roof (flush mounted); or (b) made part of the roof design (capping or framing compatible with the color of the roof or structure) or (c) a building integrated system. Mounting brackets shall be permitted if the applicant can demonstrate that the existing pitch of the roof would render the solar energy equipment ineffective or incapable of reasonable operation.
  2. When located on a sloped roof, Solar Energy Collectors shall be located on a rear or side facing roof, as viewed from a fronting street. In cases of corner lots or lots with more than one (1) street frontage the side roof fronting a street shall be considered a front facing roof.
  3. Solar Energy Systems shall not project vertically above the peak of a sloped roof to which it is attached.
  4. When located on a sloped roof, Solar Energy Collectors shall be setback at least two (2) feet from any outside edge, ridge, or valley of the roof.
  5. Solar Energy Collectors installed on a flat roof may exceed the height of the building up to five (5)-feet, except for buildings located in the High Density Commercial (HDC) district or S-1 Service District and measuring at least 75-feet tall or 5-stories, whichever is less, for which no height restriction above the roof is required.
  6. Solar Energy Collectors installed on the roof-top deck of parking facilities may exceed the height of the exterior wall of the structure up to twenty (20)-feet if a minimum stepback of five (5) feet from the outside face of the structure is provided.
  7. All exterior electrical or plumbing lines must be painted in a color scheme that matches as closely as possible the color of the structure and the materials adjacent to the lines when visible from the street.
4. Wind Energy System, General
  - a. Wind Energy Systems are permitted on any non-residentially-zoned property, except that Building-integrated or Roof-mounted Wind Energy Systems are permitted for schools, universities, parks and other institutional uses located within a residential zoning district on a property containing at least five (5) acres subject to the requirements of this Section.

- b. Ground-mounted Wind Energy Systems affixed to a monopole tower are permitted only in the HDC—High Density Commercial or S-1—Service zoning districts and shall be subject to Site Plan Review pursuant to Article VIII of this Chapter.
  - c. Noise shall not exceed St. Louis County noise ordinance standards as applicable to the building type. The applicant shall provide noise rating information at time of application.
  - d. A Wind Energy System shall not be located in the front yard of property in any zoning district or affixed to the side of a structure facing the frontage.
  - e. No more than one (1) Ground-mounted Wind Energy Systems may be installed on any commercially-zoned property. Building-integrated or Roof-mounted Wind Energy Systems shall not be subject to these limitations.
  - f. Wind Energy Systems shall be painted a neutral color so as to blend into the surroundings and shall not be bright, reflective or metallic. Illumination of Wind Energy Systems shall be prohibited, except as may be required by any state or Federal agency of competent jurisdiction. No commercial signage or attention-getting device shall be permitted, except regulatory signage required by any local, state or Federal agency of competent jurisdiction.
5. Wind Energy System, Non-residential
- a. Height: Ground-mounted Wind Energy Systems and their supporting structures are limited to a combined maximum height of 100-feet (tower mounted). Roof-mounted Wind Energy Systems shall not exceed a height of ten (10) feet above the peak roof height, except as modified through a Planned Unit Development or Special Development District procedure.
  - b. Setbacks: Wind Energy Systems must meet the principal use and accessory structure setback requirements of the district in which they are located if mounted directly on a roof or other elevated surface of a structure. If the Wind Energy System is attached to a free-standing tower the setback from all property lines shall be a minimum of fifteen (15) feet. The setback shall be measured from the furthest outward extension of all moving parts.

#### **SECTION 405.3890: PROCEDURE FOR REVIEW**

All applications for a Renewable Energy System shall require review and approval by the Architectural Review Board. Ground-mounted Solar Energy Systems and Wind Energy Systems shall require the issuance of a Conditional Use Permit pursuant to Article VII of this Chapter. Ground mounted Wind Energy Systems shall be subject to Site Plan Review pursuant to Article VIII of this Chapter.

#### **SECTION 405.3900: BUILDING PERMITS REQUIRED**

Unless otherwise exempted by the Building Official, a building permit issued by the City of Clayton is required prior to the installation of any renewable energy system. The owner of a Renewable Energy System shall ensure that it is installed and maintained in compliance with applicable building, fire and safety codes adopted by the City and any other state or Federal agency of competent jurisdiction. All wiring associated with a Renewable Energy System shall be underground or contained within a raceway that complements the building materials of the principal structure.

#### **SECTION 405.3910: ABANDONMENT**

Any Renewable Energy Systems that are noticeably in disrepair for a period exceeding six (6) months without repair or restoration procedures substantially underway shall be removed from the property and the structure and/or site restored.

#### **SECTION 405.3920: ALTERNATIVE COMPLIANCE**

In unusual circumstances arising from the unique location or character of the proposed site and/or surrounding land uses or structures, if site-specific alternative standards would provide results that are equal to or superior to those which would be provided by the standards in this Section, the Plan Commission or Architectural Review Board, as appropriate depending on the type of development and application then pending, may approve an applicant's request for alternative standards if in the body's judgment the purpose of these regulations will be satisfied and the alternative standards will have no adverse impact on any other property or unreasonably disturb the peaceful occupancy of adjoining or nearby property.

1. Procedure. An application for alternative compliance standards shall be prepared and submitted in accordance with the submittal requirements as set forth by the City of Clayton. The proposed alternative standards shall clearly identify and discuss the modifications and alternatives proposed and the ways in which the plan will better accomplish the intent of these design standards than would an approach which complies with these design standards.
2. Review criteria. To approve an alternative approach, the Planning Commission or Architectural Review Board must find that the proposed alternative approach accomplishes the intent of these standards equally well or better than would an approach which complies with these standards and the alternative standards will have no adverse impact on any other property or unreasonably disturb the peaceful occupancy of adjoining or nearby property.

#### **Section 2.**

Chapter 405 of Title IV of the Code of Ordinances of the City of Clayton, Missouri, is hereby amended by the addition of the following definitions, to read as follows:

#### **TITLE IV. LAND USE**

#### **CHAPTER 405: ZONING REGULATIONS**

#### **SECTION 405.390: DEFINITIONS**

Building-integrated Renewable Energy System: A Renewable Energy System that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building which contributes to the design of the building including, but not limited to, photovoltaic or hot water solar systems contained within roofing materials, windows, skylights and awnings.

Building-mounted Solar Energy System: A Solar Energy System affixed to either a principal or accessory structure on a lot.

Ground-mounted Solar Energy System: A Solar Energy System that is not attached to another structure and is affixed to the ground.

Ground-mounted Wind Energy System: A Wind Energy System that is not attached to another structure and is affixed to the ground with a monopole tower.

Renewable Energy Systems: Equipment and appurtenances used in the production of energy through the conversion of sun and wind energy which includes solar energy and wind energy systems.

Roof-mounted Wind Energy System: A Wind Energy System affixed to the roof of a principal or accessory structure on a lot.

Solar Energy Collector: The component of a Solar Energy System containing the flat plate or tube or other devices that absorb energy from the sun when exposed to sunlight.

Solar Energy Equipment: The Solar Energy Collectors, electronics, disconnects, valves, and other appurtenances associated with a Solar Energy System.

Solar Energy System: A building or ground-mounted photovoltaic, hot air, or hot water collector device or other type of energy system which relies upon solar radiation as the source for the generation of electricity or transfer of stored heat.

Total Height (Wind Turbine): the vertical distance from average grade at the base of the system to the tip of a wind generator blade when the tip is at its highest point.

Tower: Any structure that is used to support a wind turbine and is attached to the ground.

Wind Energy System: A wind energy conversion system consisting of a wind turbine, freestanding or attached to a structure, and associated control or conversion electronics; provided, however, that Wind Energy Systems in the City shall be limited to those which have a rated capacity of ten (10) kilowatts or less and are used for on-site consumption.

Wind Turbine: The blades and associated components mounted on top of a tower whose purpose is to convert kinetic energy of the wind into rotational energy used to generate electricity.

### **Section 3.**

Sections 405.1780; 405.1950; 405.2100; 405.2260; 405.2440; 405.2610; 405.2800 of Articles XII through XVIII of Chapter 405 of Title IV of the Code of Ordinances of the City of Clayton, Missouri, are hereby amended by the addition of the following uses to the list of permitted uses for the R-1 through R-7 Zoning districts, to read as follows:

### **TITLE IV. LAND USE**

## **CHAPTER 405: ZONING REGULATIONS**

### **SECTIONS 405.1780; 405.1950; 405.2100; 405.2260; 405.2440; 405.2610; 405.2800: PERMITTED USES**

Solar Energy Systems, Building-mounted (subject to the provisions of Article XXVIII): P  
Solar Energy Systems, Ground-mounted (subject to the provisions of Article XXVIII): C  
Wind Energy Systems, Building-mounted (subject to the provisions of Article XXVIII): C

*P= Permitted Use (by-right); C= Conditional Use (via Conditional Use Permit)*

#### **Section 4.**

Sections 405.2940; 405.3120; 405.3290; 405.3430 of Chapter 405 of Articles XIX through XXII of Title IV of the Code of Ordinances of the City of Clayton, Missouri, are hereby amended by the addition of the following uses to the list of permitted uses for the C-1, C-2, HDC and S-1 Zoning districts, to read as follows:

#### **TITLE IV. LAND USE**

### **CHAPTER 405: ZONING REGULATIONS**

#### **SECTIONS 405.2940; 405.3120; 405.3290; 405.3430 PERMITTED USES**

Solar Energy Systems, Building-mounted (subject to the provisions of Article XXVIII): P  
Solar Energy Systems, Ground-mounted (subject to the provisions of Article XXVIII): C  
Wind Energy Systems, Building Mounted (subject to the provisions of Article XXVIII): C

(HDC and S-1 Districts only)

Wind Energy Systems, Ground Mounted (subject to the provisions of Article XXVIII): C

*P= Permitted Use (by-right); C= Conditional Use (via Conditional Use Permit)*

#### **Section 5:**

Section 405.1000 of Article VIII of Chapter 405 of Title IV of the Code of Ordinances of the City of Clayton, Missouri, is hereby amended by the repeal of Subsection 3 and the enactment of a new Subsection 3 in lieu thereof to read as follows:

#### **TITLE IV. LAND USE**

### **CHAPTER 405: ZONING REGULATIONS**

#### **ARTICLE VIII. SITE PLAN REVIEW**

#### **SECTIONS 405.1000 Requirements, subsection 3.**



3. *Accessory structures.* Site plan review may be required, at the discretion of the Director of Planning and Development Services, for all (commercial and residential) accessory structures whenever such structures exceed twenty-five percent (25%) of the total square footage of the existing principal structure. Additionally, site plan review may be required, at the discretion of the Director of Planning and Development Services, for residential accessory structures, whenever such structures exceed six hundred (600) square feet in size and/or exceed fifteen (15) feet in height. Site plan review is required for all ground-mounted wind energy renewable energy systems pursuant to Article XXVIII; however, such systems may be reviewed in conjunction with the review of principal structures.

#### **Section 6:**

The Chapter, Article, Division and/or Section assignments designated in this Ordinance may be revised and altered by the codification company servicing the Municipal Code of the City of Clayton upon supplementation of such code if, in the discretion of the editor, an alternative designation would be more reasonable. In adjusting such designations the editor may also change other designations and numerical assignment of code sections to accommodate such changes.

#### **Section 7.**

It is hereby declared to be the intention of the Board of Aldermen that the sections, paragraphs, sentences, clauses, phrases and words of this ordinance are severable, and if any section, paragraph, sentence, clause, phrase or word(s) of this ordinance shall be declared unconstitutional or otherwise invalid, such unconstitutionality or invalidity shall not affect any of the remaining sections, paragraphs, sentences, clauses, phrases and words of this ordinance since the same would have been enacted by the Board of Aldermen without the incorporation in this ordinance of any such unconstitutional or invalid portion of the ordinance.

#### **Section 9.**

This Ordinance shall be in full force and effect both from and after its passage by the Board of Aldermen.

**Passed by the Board of Aldermen this 28th day of February, 2012.**

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Mayor

Attest:

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City Clerk